

STRUCTURE 150

This structure is a five-barrel corrugated metal pipe culvert, located through L-5 on the north perimeter of Conservation Area 3, about 24 miles southeast of South Bay. Control is effected by manually operated sluice gates mounted on a steel frame erected on the upstream of the structure.

PURPOSE

This structure, together with S-8, permits release of water from Lake Okeechobee and the agricultural area south of the lake into Conservation Area 3. Structure 150 functions in this capacity only under gravity conditions, that is, when the headwater elevation exceeds the tailwater.

OPERATION

This structure is remotely operated under either flood or normal conditions.

Flood Conditions

The gates of this structure are opened whenever:

1. Water is not needed to meet the Regulation Schedule of Conservation Area 2A and Conservation Area 3A is below schedule and water is available in the North New River Canal.
2. The tailwater elevation does not exceed the headwater elevation.

Normal Conditions

This structure may be used to supplement the discharge of S-8 into Conservation Area 3A, when the headwater elevation exceeds the tailwater elevation and when this discharge will not interfere with the discharge of S-7 into Conservation Area 2A.

When WCA 3A is high, S-150 can release excess water in WCA 3A into the EAA for water supply.

FLOOD DISCHARGE CHARACTERISTICS

	Design
Discharge Rate	<u>1000</u> cfs
	* <u> </u> % of SPF
Headwater Elevation	<u>11.0</u> feet

Tailwater Elevation 10.0 feet
Type Discharge controlled
submerged

*Designed for Normal Conditions

DESCRIPTION OF STRUCTURE

Type Corrugated metal pipe culverts with upstream control

Number of barrels 5

Size of barrels 84 inches

Length of barrels 92 feet each

Flow line elevation 3.0 feet

Service bridge elevation 19.0 feet

Gates

Number 5

Type Hardisty Model 30-05C

Size 84 inch diameter

Control Manual or remote ly operated with gear reduced electric motor with clutch

Lifting Mechanism -

Type Hoist Manually or remoted operated with gear reduced electric motor with clutch

Normal Power - Commercial electric power

Emergency Power - LP Gas backup generator

Date of Transfer: March 8, 1968

ACCESS: from U.S. Highway 27 via about 1000' of access road on top of L-5

HYDRAULIC AND HYDROLOGIC MEASUREMENT

Water Level Remote digital headwater and tailwater recorders

Gate Position Recorder Remote digital recorder on all gates

DEWATERING FACILITIES (per gate) None